

# Claims

- [c1] 1. A joint prosthesis, comprising:
- a head member so sized and shaped as to be articulatable with a joint socket, the head member defining a head bore;
  - a neck member, having
    - a base;
    - a plug protruding from the base so sized and shaped as to be receivable in the head bore; and
    - a spigot protruding from the base, the spigot having a first cylinder adjacent the base, and a second cylinder having a diameter and being disposed adjacent the first cylinder, the first cylinder having a diameter greater than the diameter of the second cylinder; and
  - a stem member, having
    - a proximal end defining a stem bore, the stem bore sized and shaped for receiving the spigot and for engaging the periphery of the first cylinder of the spigot in the stem bore by friction-tight press-fit when the stem bore receives the spigot; and
    - a shaft extending from the proximal end and being sized and shaped for seating in a cavity of a long bone.

- [c2] 2. The joint prosthesis of claim 1, wherein the base of the neck member defines at least one receptacle.
- [c3] 3. The joint prosthesis of claim 2, wherein the stem member further comprises a key protruding from the proximal end, the key so positioned as to be received in the at least one receptacle of the neck member as the stem bore receives the spigot.
- [c4] 4. The joint prosthesis of claim 3, wherein the base of the neck member further defines a plurality of receptacles, and the key is selectively positionable in one of the plurality of receptacles.
- [c5] 5. The joint prosthesis of claim 1, wherein the spigot further comprises a transition zone of tapering diameter positioned between the first cylinder and the second cylinder.
- [c6] 6. The joint prosthesis of claim 1, further comprising a protrusion fixedly located in the stem bore, wherein the spigot is distally so split as to define thereby at least one axially oriented slot, and wherein the protrusion is sized, shaped, and positioned for insertion into the axially oriented slot as the spigot is inserted into the stem bore, the protrusion further being sized and shaped for radially expanding the spigot to secure the spigot within the

stem bore as the spigot becomes fully seated in the stem bore.

- [c7] 7. The joint prosthesis of claim 1, wherein the stem member further comprises a distal end, the distal end defining at least one axially oriented slot.
- [c8] 8. The joint prosthesis of claim 1, wherein the shaft terminates in a distal end having at least three times defined by slots in the shaft, the slots forming an acute angle.
- [c9] 9. The joint prosthesis of claim 1, wherein the base of the neck member has a longitudinal axis, and wherein the spigot and the plug protrude from the base in the same plane, the spigot protruding at substantially a right angle to the longitudinal axis of the base, and the plug protruding at an angle of 40 to 50 degrees relative to the longitudinal axis of the base.
- [c10] 10. A joint prosthesis, comprising:
  - a head member so sized and shaped as to be articulatable with a joint socket, the head member defining a head bore;
  - a neck member, having
    - a base defining at least one receptacle;
    - a plug protruding from the base so sized and shaped as to be receivable in the head bore; and

a spigot protruding from the base; and  
a stem member, having  
a proximal end defining a stem bore, the stem bore sized and shaped for receiving the spigot and for engaging the spigot in the stem bore by friction-tight press-fit when the stem bore receives the spigot;  
a key protruding from the proximal end, the key so positioned as to be received in the at least one receptacle of the neck member as the stem bore receives the spigot; and  
a shaft extending from the proximal end and being sized and shaped for seating in a cavity of a long bone.

[c11] 11. The joint prosthesis of claim 10, further comprising a protrusion fixedly located in the stem bore, wherein the spigot is distally so split as to define thereby at least one axially oriented slot, and wherein the protrusion is sized, shaped, and positioned for insertion into the axially oriented slot as the spigot is inserted into the stem bore, the protrusion further being sized and shaped for radially expanding the spigot to secure the spigot within the stem bore as the spigot becomes fully seated in the stem bore.

[c12] 12. The joint prosthesis of claim 10, wherein the shaft terminates in a distal end having at least three tines de-

fined by slots in the shaft, the slots forming an acute angle.

[c13] 13. A joint prosthesis, comprising:  
a head member so sized and shaped as to be articulatable with a joint socket, the head member defining a head bore;  
a neck member, having  
    a base;  
    a plug protruding from the base so sized and shaped as to be receivable in the head bore; and  
    a spigot protruding from the base; and  
a stem member, having  
    a proximal end defining a stem bore, the stem bore sized and shaped for receiving the spigot and for engaging at least a portion of the periphery of the spigot in the stem bore by friction-tight press-fit as the neck member becomes fully seated on the stem member; and  
    a shaft extending from the proximal end and being sized and shaped for seating in a cavity of a long bone.

[c14] 14. The joint prosthesis of claim 13, wherein the spigot and the stem bore are substantially cylindrical.

[c15] 15. The joint prosthesis of claim 13, wherein the spigot

has a free end that terminates with a taper.

[c16] 16. The joint prosthesis of claim 13, wherein the base of the neck member defines at least one receptacle.

[c17] 17. The joint prosthesis of claim 16, wherein the stem member further comprises a key protruding from the proximal end, the key so positioned as to be received in the at least one receptacle of the neck member as the stem bore receives the spigot.

[c18] 18. The joint prosthesis of claim 17, wherein the base of the neck member further defines a plurality of receptacles, and the key is selectively positionable in one of the plurality of receptacles.

[c19] 19. A stem component of a joint prosthesis, comprising:  
a proximal end; and  
a shaft extending from the proximal end, the shaft sized and shaped for seating in a cavity of a long bone, and the shaft terminating in a distal end having at least three tines defined by slots in the shaft, the slots forming an acute angle.

[c20] 20. The stem component of claim 19, wherein at least one of the tines has at least one sharp cutting edge.